

**Through a Glass and Darkly:
Attitudes Toward International Trade and the Curious Effects of Issue Framing**

Abstract

Are most voters opposed to globalization? In the wake of recent political debates about “outsourcing” of jobs and trade agreements like NAFTA, and after a string of protests that have disrupted meetings of the World Trade Organization, the question has become increasingly salient. A growing body of empirical research, using data from available surveys of public opinion, suggests that anti-globalization sentiments are very strong, especially among blue-collar workers. This paper reports the findings from a new survey experiment aimed at measuring the impact of issue framing on individuals’ stated attitudes toward international trade. Respondents given an anti-trade introduction to the survey question, linking trade to the possibility of job losses, were 17% less likely to favor increasing trade with other countries than were those asked the same question without any introduction at all. Curiously, respondents who were given a pro-trade introduction to the question, suggesting that trade can lead to lower prices for consumers, were *not* more likely to express support for trade than those who received no introduction. In addition, the responses of less educated individuals were more sensitive to framing effects than those of highly educated individuals. Results from a second experiment reveal that knowledge of the endorsement of trade openness by leading economists mitigates framing effects and raises overall support for trade liberalization by a substantial degree.

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I. Introduction

The dramatic growth in international trade and investment over the past decades has intensified the debate over globalization in American politics. The recent controversy about “outsourcing” of jobs to foreign locales, arguments about NAFTA and other trade agreements, and protests and demonstrations that have disrupted meetings of the World Trade Organization, have all revealed substantial political opposition to trade liberalization. A major political battle over trade policy may well be looming in the near future. Indeed, the idea of an imminent popular backlash against globalization has emerged in a variety of scholarly studies in recent years. Based upon data drawn from the most prominent political opinion surveys, analysts have concluded that roughly 60% of voters in the United States and in other western economies are opposed to trade liberalization (e.g., Scheve and Slaughter 2001; Mayda and Rodrik 2004). Taken at face value, this finding is actually quite shocking. In the most developed, democratic economies, where governments have officially championed greater trade openness since the 1940s, almost two-thirds of voters are – apparently – opposed to it.

However, public opinion surveys may provide a very imperfect guide to the real attitudes and policy preferences of voters, in so far as top-of-the-head responses to pollsters are strongly influenced by the specific wording of the questions posed and how these words “frame” particular issues. Powerful framing effects have been discovered across a range of policy issues in experimental studies that present subjects with choices that are logically equivalent but differ in whether some purportedly relevant information is presented in various ways (see Jacoby 2000; Nelson and Kinder 2000; Druckman 2001a). Surveys of attitudes toward trade seem especially open to framing effects since trade, like other aspects of foreign and economic policy, is a complex issue about which many voters are notoriously uninformed, and about which various emotions – such as national pride – are often invoked (see Bauer, Pool, and Dexter 1972, 81-84; Destler 1995, 180). To make reliable inferences about voters’ true attitudes toward trade we need a much better understanding of the impact of framing on responses to survey questions about this issue.

This paper presents the findings from a new survey experiment aimed at measuring the impact of framing on individuals' stated attitudes toward international trade. The results demonstrate that issue framing has large effects on responses. Respondents given an anti-trade introduction to the survey question, linking trade to the possibility of job losses, were 17% less likely to favor increasing trade with other nations than those asked the same question without any introduction at all. Since the existing surveys have typically incorporated a similar (anti-trade) wording when posing questions about international trade, this strongly suggests that concerns about widespread opposition to trade among voters have been overstated (at least, relative to what they would have been had alternative question wordings been used in earlier surveys). Overall, among those administered no introduction at all to the question about trade, 71% favored increasing trade. Curiously, respondents who were given a pro-trade introduction to the question, suggesting that trade can lead to lower prices for consumers, were *not* more likely to express support for trade than those asked the question with no introduction. The most common pro-trade rhetoric thus appears to be completely ineffective in raising support for trade among voters.

I also report results from a second experiment to test whether advice about trade from a third-party source might influence the degree to which respondents are swayed by issue framing. The idea here is that, while framing might have a large impact on the way individuals respond to survey questions on issues about which they have little information, when making choices in the real world (say, about whether they should vote for a particular electoral candidate), individuals can observe advice from sources of information they trust (see Popkin 1994; Lupia and McCubbins 1998; 2001b). The results indicate that the (anti-trade) framing effects observed in the main experiment are significantly reduced among respondents who are informed that most leading economists endorse trade liberalization. The knowledge about the advice from economists also raises overall support for trade substantially. Combined these results suggest that competition for endorsements may play a far larger role in actual politics than competition in framing. Framing effects, though, remain a critical problem for research that uses survey data.

II. Attitudes Toward International Trade

A growing body of research by economists and political scientists has examined survey data on individual attitudes toward trade. These studies have had two types of goals: first, to gauge overall levels of opposition to trade openness among voters to see whether a popular backlash against globalization is imminent; and second, to assess various determinants of individual policy preferences to see whether opposition to globalization is concentrated among particular socio-economic groups.

A. Measuring Opposition to Trade Liberalization

Scheve and Slaughter (2001) have recently reviewed a large body of evidence from opinion surveys administered in the United States in past decades, concluding that, in general, a plurality or a majority of Americans have been opposed to policies to liberalize trade, at least since the 1970s. Averaging the results from National Election Studies (NES) surveys conducted in 1992 and 1996, which they examined in detail, they report that around 62% of respondents favored new trade restrictions. Based upon 1995 survey data from the United States and 22 other western nations gathered by the International Social Survey Programme (ISSP), Mayda and Rodrik (2004) and O'Rourke and Sinnott (2002) reach similar conclusions, reporting that some 58% of respondents across these nations support trade barriers.¹ If accurate, this is quite remarkable. Governments in these nations have pursued trade liberalization as a basic component of economic policy for several decades; the surveys suggest that roughly two-thirds of voters are opposed to such liberalization.

How much faith can we place in these findings? The clearest danger, in terms of the validity of the inferences about voters' true trade policy preferences, is that responses to survey questions may be strongly influenced by the specific ways in which the questions are worded or framed. *Framing* effects are produced when an alteration in the particular words used when presenting individuals with a choice

¹ Mayda and Rodrik also examined the data on a broader variety of countries provided in the third wave of the World Values Survey, conducted between 1995 and 1997 in 47 countries: here they report that 65% of respondents surveyed in these countries favored stricter limits to trade (2004, 9).

problem causes them to select different options (Druckman 2001a, 227).² Strong framing effects have been discovered in a variety of experiments that present subjects with choices that are logically equivalent but differ in whether some critical information is presented in a particular way. Most famously, experiments in the field of psychology have shown that individuals appear to prefer risk-averse alternatives when outcomes are framed in terms of potential gains but prefer risk-seeking alternatives when equivalent outcomes are framed in terms of potential losses – the “loss aversion” effect first noted by Kahneman and Tversky (1979).³ In political science research, numerous experiments have shown that respondents’ choices on a wide range of policy issues are strongly affected by whether some particular aspects of an issue are emphasized rather than others in the wording of the question – the social science equivalent of the lawyer’s “leading” question (see Jacoby 2000; Nelson and Kinder 2000; Druckman 2001a). One prominent experiment, for instance, has shown that support for welfare spending varies markedly depending upon whether it is described in terms of raising the chances for poor people to get ahead or in terms of increased taxes (Sniderman and Theriault 1999). Surveys of attitudes toward trade seem especially fraught with potential for framing effects since trade, like other dimensions of foreign policy, is typically regarded as a complex issue about which voters have little information (Bauer, Pool, and Dexter 1972, 81-84).⁴ Indeed, in the past, analysts of U.S. trade politics have usually just pointed out that responses to surveys vary so markedly with changes in question wording that it is extremely difficult

² For similar definitions, see Iyengar 1991, 11; Rabin 1998, 36; Page and Shapiro 1992, 168; Zaller 1992, 32. One can also identify framing effects in cases where individuals make similar choices but for different reasons; on these types of framing effects, see Nelson, Oxley, and Clawson 1997.

³ Researchers in the growing field of “behavioral economics” have been exploring related issues involving tendencies among individuals to make seemingly irrational choices: see Rabin 1998.

⁴ By one count, some 45 percent of American survey respondents are unable to define the meaning of a “tariff,” casting grave doubt over any surveys asking people’s views on whether tariffs or import duties are good or bad (see Pryor 2002). Data reported in Delli Carpini and Keeter (1989, 70) suggest that even simpler terms are problematic: only 39% of respondents to a 1953 survey could define “free trade.”

to locate where the public stands on the issue (e.g., Bauer, Pool, and Dexter 1972, 81-84; Destler 1995, 180; Pryor 2002; see also Schneider 1985).⁵

One immediate question is whether particular surveys, and specifically those that have been used in the most recent studies of attitudes toward trade, employ question wordings that might encourage respondents to answer in a certain way. The NES surveys of 1992 and 1996, examined in detail by Scheve and Slaughter (2001), employed the following wording when asking about the trade issue:

Some people have suggested placing new limits on foreign imports in order to protect American jobs. Others say that such limits would raise consumer prices and hurt American exports. Do you favor or oppose placing new limits on imports, or haven't you thought much about this?

While this question is designed to provide both sides of the argument to respondents, the ice here seems very thin. Much depends on whether the two opposing sets of considerations are really equivalent in terms of their framing effects. One might suspect that an appeal to protecting American jobs is likely to have much more raw appeal to an uncertain respondent than an argument about consumer prices or American exports; but without some way to gauge the preferences of individuals independently from this particular question wording, it is impossible to tell.⁶

The question on trade in the 1995 ISSP National Identity module, used by Mayda and Rodrik (2004) and O'Rourke and Sinnott (2002), is even more clearly biased by an anti-trade frame. It reads:

Now we would like to ask a few questions about relations between [*respondent's country*] and other countries. How much do you agree or disagree with the following statement: [*respondent's country*] should limit the import of foreign products in order to protect its national economy?

There is an obvious problem here since the question refers to the benefits of restricting imports but not the costs. It also uses the value-laden language of protecting the national economy, and forces the hesitant pro-trade respondent to disagree with an anti-trade point of view. There are similar problems with the

⁵ This is also the traditional assessment of voter opinions on foreign policy issues more generally (e.g., Lippmann 1922; Almond 1950; Converse 1964). Although recent studies suggest there may be more stability in some core attitudes towards foreign policy issues than originally thought: see Holsti 1996, ch.3.

⁶ I refrain here from a discussion of whether it is actually correct to suggest that trade barriers do result in more jobs than trade liberalization, or whether this is the correct metric by which to measure welfare effects (in general or even among low-income workers, specifically). For a detailed discussion, see Irwin 2002.

wording of the trade question in the 1995-97 World Values Survey, which Mayda and Rodrik (2004) also use in their work. The WVS asks respondents:

Do you think it is better is: (1) Goods made in other countries can be imported and sold here if people want to buy them; (2) There should be stricter limits on selling foreign goods here, to protect the jobs of people in this country; or (9) Don't Know.

The scholarly work that has applied data from these surveys to make inferences about voters' attitudes toward trade has not overlooked the possibility of framing effects. Mayda and Rodrik (2004), and O'Rourke and Sinnott (2002), acknowledge that the framing of the ISSP question may have biased responses in favor of protectionism, but they are for the most part unconcerned since they are more interested in explaining variation in attitudes across individuals than in gauging overall levels of opposition to trade (Mayda and Rodrik 2004, 8; O'Rourke and Sinnott 2002, 164 n19) – although whether framing effects can be safely ignored in this case is actually debatable (an issue discussed in the next section). O'Rourke and Sinnott also suggest that the language used by the ISSP survey is unproblematic since “this is the way protectionist measures are defended in political discourse” (2002, 164 n19). The invocation to “protect” the national economy is certainly one type of framing that appears in political debates about trade, but it is not the only type. At least the NES question includes claims made by those on both sides of the trade issue – we are just left in the dark as to whether these frames are evenly matched in terms of their use in political discourse and in their power to persuade.

Scheve and Slaughter (2001) are more keenly interested in estimating overall levels of support for trade protection among the public and argue that this can be accomplished using existing surveys regardless of framing effects.⁷ They compare results from a large variety of surveys administered in recent years in the United States and conclude that, even when questions about trade have been worded quite differently, one can confidently infer that a plurality or majority of Americans are opposed to trade

⁷ Scheve and Slaughter do acknowledge that question wording does affect survey results; in fact, they point out various ways in which changes in question wording appear to have altered responses to surveys about trade in substantial ways. But they maintain, nevertheless, that a general (majority or plurality) opposition to trade liberalization among voters can be clearly discerned regardless of any variations question framing.

liberalization. They make two key points about why attention to question wording is not critical in this respect. The first of these is that, when asked questions that mention both the costs and benefits of trade, a plurality or majority of respondents choose the answer that emphasizes the costs of trade (2001, 20-26). Here the assumption seems to be that such framing effects, set in opposition to one another in the wording of a survey question, are inherently symmetrical. But it is extremely difficult to assess the overall fairness of questions that say something about both sides of the trade argument when we know so little about which particular wordings or types of information have the greatest impact on responses.⁸

The second reason Scheve and Slaughter give for discounting the importance of framing is that, when asked a question that does not mention either the benefits or the costs of trade, a plurality or majority of individuals still oppose trade liberalization (2001, 27-33). On this point, however, the key evidence seems to contradict them.⁹ A 1999 poll by the Program on International Policy Attitudes (PIPA), simply asked respondents: “Overall, with regard to international trade, do you think that it should be the goal of the US to: Try to actively promote it; simply allow it to continue; try to slow it down; or try to stop or reverse it.” Some 58% of individuals reported that they were either happy with existing trends or would even like to accelerate them.¹⁰ And a much-publicized recent poll by the Pew Global Attitudes

⁸ Some of the “two-sided” survey questions that Scheve and Slaughter examine actually seem rather unfair, employing wordings tilted in favor of more protectionist responses. A 1996 CNN poll, for instance, presented individuals with two statements: “The United States should tax foreign goods imported into this country in order to protect American jobs and wages.” And “The United States should not tax foreign goods imported into this country because this will raise the prices American consumers will have to pay for these goods.” It is not surprising that 66% of respondents said they supported taxing foreign goods, as this was the only option consistent with protecting American jobs and wages, and the tax on foreign goods sounds as if it might be something paid by foreigners.

⁹ A prime example is a 2002 Harris poll which asked: “Do you consider yourself to be someone who believes in free trade or trade without any restrictions, someone who believes in fair trade or trade with some standards for labor and the environment, or someone who is protectionist, meaning that there should be rules to protect US markets and workers from imports?” Only 10% of respondents described themselves as “free traders,” while 52% favored fair trade, and 37% considered themselves protectionist. Scheve and Slaughter conclude from this that protectionists outnumber free traders by 4-to-1. But how one should count the 52% who chose the middle option is unclear given the way the question is worded, forcing a choice between an extreme free trade position (no restrictions) and options that allow for a large range of viewpoints.

¹⁰ See PIPA 1999. In the same year a PIPA survey generated almost identical results in response to the following question: “I would like to know how you feel about the process of increasing trade between countries through lowering trade barriers, such as taxes on imports. Do you feel this process has been going too fast, too slowly, or at the right pace?” The responses were: Much too fast (12.6%); a bit too fast (17.3%); at about the right pace (38.9%);

Project has found majority support for trade in the United States and in many other nations when respondents were simply asked whether they thought “growing trade and business ties” between their own country and other nations was good or bad for the country. In the United States, some 82% of respondents said that the growth of trade was a good thing (Pew 2003).¹¹ At the very least it seems clear that responses to survey questions about trade shift markedly with changes in the ways those questions are worded. Table 1 reports average opposition to trade openness as assessed by responses to the 1995 ISSP survey, used by Mayda and Rodrik (2004) and O’Rourke and Sinnott (2002), and the 2003 Pew survey, for countries included in both studies.

[Table 1]

The differences are dramatic: according to the responses to the Pew survey, opposition to increasing trade constitutes a minority view in all these countries (representing the position of as little as 6% of surveyed individuals in Germany). But responses to the ISSP give the opposite impression, suggesting that clear majorities in most of these countries favor new limits on trade (reaching as high as 77% in Bulgaria). The surveys were conducted eight years apart, which might explain some of this variance, but clearly the different ways in which the questions have been worded are critical.¹²

B. Which Individuals are Opposed to Trade Liberalization and Why?

To date, the analysis of survey data aimed at revealing the determinants of individual attitudes toward trade has focused predominantly on occupational differences among respondents. A principal aim has been to test standard economic models that describe the income effects of trade for different individuals as a function of the types of productive inputs they own and the types of industries in which they are employed. Examining data from recent NES surveys in the United States, Scheve and Slaughter

a bit too slowly (14.2%); much too slowly (9.1%). Thus, some 62% of those polled said that trade liberalization was proceeding at about the right pace or too slowly.

¹¹ The Pew results must be treated cautiously too, of course. Seligson (1999, 133) points out that focus group research has shown that survey questions about “economic integration” in Latin America that do not mention potential costs appear to elicit “knee-jerk” support – that is, respondents tend to answer very quickly and positively.

¹² This is not to suggest that the Pew results

(2001) emphasized the importance of respondents' "human capital" or skills (measured principally by years of education), finding that individuals with lower skills were more likely to support restrictions on imports than those with higher skills. Mayda and Rodrik (2004) and O'Rourke and Sinnott (2002) came to similar conclusions after examining the data from the 1995 ISSP survey: again skill levels, measured either by year of education (Mayda and Rodrik) or occupational categories (O'Rourke and Sinnott), were found to have large effects on attitudes, with lower skilled individuals most protectionist in outlook. In terms of economic theory, these findings have been interpreted as providing strong support for the Stolper-Samuelson theorem (1941), which predicts that trade raises real incomes for those who own factors with which the economy is relatively well endowed (i.e., skills for the US and other developed economies), while disadvantaging owners of other factors (unskilled or low skilled labor).¹³ Mayda and Rodrik also found evidence that people in import-competing industries are significantly more likely than others to favor trade protection (see Jones 1971; Mussa 1974) – a finding that better fits the "specific factors" model of the distributional effects of trade which, unlike the Stolper-Samuelson theorem, allows that factors of production are not perfectly mobile between different sectors in the economy, and so the incomes of individuals are tied more closely to the fortunes of the industries in which they are employed or invested.¹⁴ Studies using alternative sources of data on trade-related attitudes in Canada and across Europe have matched both types of findings (see Gable 1998; Balistreri 1997; Beaulieu 2003).

There are other predictors of trade policy preferences besides these standard economic variables, of course, although the theoretical underpinnings for these are typically less clear. Age appears to be significantly associated with support for protection among individuals in some studies (e.g., Mayda and Rodrik; 2004; O'Rourke and Sinnott 2002) but not in others (e.g., Scheve and Slaughter 2001; Beaulieu 2002). Gender shows up as an even stronger and more consistent predictor of views on trade: women

¹³ This theorem has been used extensively in the analysis of trade politics: see Rogowski 1989; Hiscox 2002.

¹⁴ The specific factors approach underpins much of the most recent analysis of the political economy of trade in contemporary advanced economies: see Magee 1980; Grossman and Helpman 1994; Hiscox 2002.

seem to be substantially more protectionist than men in almost every study.¹⁵ In addition, various types of self-expressed values appear to affect individuals' trade preferences; in particular, strong attachments to neighborhood and community, feelings of national pride, and distrust of foreigners are all positively associated with support for trade protection (see O'Rourke and Sinnott 2002; Mayda and Rodrik 2004).

Is it reasonable to ignore potential framing effects when making inferences about these types of determinants of attitudes toward trade? Both Mayda and Rodrik (2004) and O'Rourke and Sinnott (2002) suggest that it is, as long as one makes a critical assumption. As Mayda and Rodrik put it when discussing the anti-trade wording in the ISSP survey: "Even though the responses on trade may be biased in one direction, our results will not be affected unless the magnitude of the bias is also correlated with our explanatory variables" (2001, 8). But *there* is the rub: how do we know that sensitivity to issue framing is uncorrelated with the explanatory variables in these studies? This seems especially risky to assume for the core explanatory variable highlighted in all these analyses: the education or skill levels of respondents. More educated respondents are more likely to have read and thought about the trade issue themselves, are more likely to understand how trade affects their own lives and the nation as a whole, and thus are more likely to have reached firmer a priori positions on the trade question. More educated individuals should also be more willing to express points of view that challenge those implied in the wording of the question itself. Studies have found that individuals with more political information or knowledge are indeed influenced less by issue framing than others (see Kinder and Sanders 1990; Iyengar 1991, 118; McGraw and Hubbard 1996; Sniderman and Theriault 1999; Haider-Markel and Joslyn 2001), as are those with higher cognitive abilities (see Stanovich and West 1998; Levin et al 1998).¹⁶ Since both knowledge and

¹⁵ For a detailed study of the gender gap in trade policy preferences, see Burgoon and Hiscox (2003).

¹⁶ There is some debate in the literature on political communication, it might be noted, about how these results should be interpreted. Nelson, Oxley, and Clawson (1997) have argued that *framing*, which they define as "activating" information that respondents have stored as memory, can be distinguished from *priming* (making particular information temporarily more "accessible") and *persuasion* ("adding" new information). They thus expect more informed respondents to be *more* susceptible to framing per se, because they make a better connection between frames and information stored in their own memories, but *less* susceptible to priming and persuasion. In recent experiments, Druckman and Nelson (2003) have found that more informed respondents were more responsive to issue framing, but only controlling for the firmness of a prior opinions (which was highest among the most informed

cognitive abilities are related to education levels, this suggests a potentially large problem for the inferences made in existing analyses.¹⁷ In sum, it seems clear that in order to make reliable inferences, certainly about the general trade preferences of voters, but even about the connection between particular characteristics of individuals and their responses to survey questions about trade, we need to know much more about the potential biases that framing effects can produce.

III. The Survey Experiment

A. Design of the Core Experiment

The experiment was conducted through the Time-Sharing Experiments for the Social Sciences (TESS) program.¹⁸ The TESS survey was administered to a random sample of 1,610 American adults by telephone in June and July 2003 by the Center for Survey Research (CSR) at Indiana University.¹⁹ For the core experiment, respondents were randomly allocated to 4 groups, with each group receiving different introductions to the survey questions about international trade. These introductions (read by the interviewer) mentioned some possible beneficial effects of trade, some possible costs, or both types of effects (the fourth group received no introduction at all). The exact wordings are shown below, with percentages indicating the size of the group in relation to the entire sample:

Group 1 (15%): Pro-trade introduction.

Many people believe that increasing trade with other nations creates jobs and allows Americans to buy more types of goods at lower prices.

Group 2 (15%): Anti-trade introduction.

Many people believe that increasing trade with other nations leads to job losses and exposes American producers to unfair competition.

and strongly associated with less susceptibility to framing). The various distinctions made by scholars of political communication are less relevant here than the weight of evidence suggesting that responsiveness to question framing is related to levels of knowledge (and thus, education).

¹⁷ Delli Carpini and Keeter (1989, 144-45, 188-99) have shown that education is the most important single predictor of political knowledge.

¹⁸ *Time-Sharing Experiments for the Social Sciences*, NSF Grant 0094964, Diana C. Mutz and Arthur Lupia, Principal Investigators.

¹⁹ An extensive set of pre-survey tests, along with interviewer training, were conducted by CSR in May and June 2003, aimed at making the questions as clear as possible and improving response rates and reliability. For a full description of the TESS/CSR survey process see: <http://www.experimentcentral.org>

Group 3 (15%): Both introductions.

Many people believe that increasing trade with other nations creates jobs and allows Americans to buy more types of goods at lower prices. Others believe that increasing trade with other nations leads to job losses and exposes American producers to unfair competition.

Group 4 (15%): No introduction.

In addition to these core experimental groups, 4 separate groups (each comprising 10% of the sample) were assigned the same set of “frames” as above, were also read an introduction that described the consensus view among economists that favors trade openness (that separate experiment is discussed in section D. below).

The specific claims made in the introductions provided to the different groups about the potential costs and benefits of trade were chosen using the results from Roper polls from the 1970s which asked respondents to rate the most persuasive arguments for and against import restrictions (see Schneider 1985). At the top of these lists were job losses in import-competing sectors and unfair competition from abroad (among arguments in favor of import restrictions), and job creation in exporting sectors and lower prices for consumers (among arguments against import restrictions). While there are many other possible frames that would emphasize different pro-trade or anti-trade considerations, these ones appeared to be the most important ideas mentioned by voters *themselves* in past polls, they are common in political debates over the issue, and they are also reasonably easy to state in simple and clear terms. I tried to create a simple symmetry here too: most importantly, given that “jobs” are the political touchstone, the potential for job creation via export growth is matched here against the potential for job losses as a consequence of import competition.

After the introductions were read, all survey respondents were asked the same core question about their attitudes toward international trade:

Do you favor or oppose increasing trade with other nations?

- Favor
- Oppose
- Don't know

- Refused

Depending on their answer, the interviewer then asked:

Is that strongly favor (oppose) or somewhat favor (oppose)?

- Strongly
- Somewhat
- Don't know
- Refused

Choosing the specific language for this core question was a difficult task. As in most recent surveys, I avoided references to “tariffs” (or “duties”) since there is evidence that a large proportion of respondents do not know what a tariff is; I also avoided references to trade “restrictions” and “barriers,” since the pre-survey tests revealed similar anxiety among respondents about the meaning of these terms. Asking respondents whether they favored “limits” on imports was the most serious alternative to asking them about increasing trade. But to avoid forcing respondents to choose between an extreme view (no limits) and all other plausible views, one would have to allow for a variety of choice options (e.g., some limits, many limits?), the meaning of which would be rather difficult to interpret.

The reference to increasing trade does not distinguish as to whether this change is (or would be) due to government policies or to other forces (e.g., technological improvements in communication and transportation) not counteracted by government policies. This particular form of ambiguity is a good thing, I think. It allows for respondents to take a position on globalization writ large – the process that is a function of both policy (trade liberalization) and changes in technology – and avoids confusion about the past or potential use of specific types of policy instruments. In terms of the theoretical predictions about the distributional effects of trade drawn from economic theory it makes no substantive difference whether the stated expansion in trade is due to alterations in policy or to other types of changes that lower the costs of international transactions.

One final point is worth making about the core trade question employed here. No question can be entirely frame-free in the sense that the language chosen, even if it is not intentionally designed to invoke

positive or negative views about the trade issue, may still unintentionally bias respondents toward a particular response. In this case, substantive considerations aside, whether asking people about “increasing trade with other nations” is more likely to elicit positive responses than alternative types of wordings (e.g. a reference to decreasing trade with other nations) is unclear. It presumably hinges on whether people are inherently more likely to respond in a positive or negative way to trends in general. The only point here is that it would be misleading to describe the question itself, devoid of any of the introductions, as completely unframed or neutral.

B. Framing Effects on Support for Trade

Table 2 reports the simple frequencies of each type of response in each of the 4 core experimental groups.²⁰ The results confirm that issue framing has large effects on responses. In particular, there are stark differences between Groups 2 and 3, the only respondents who were read anti-trade arguments before they were asked for their own views about trade, and the other groups. Compared to respondents who were given no introduction at all to the question about trade (Group 4), 17% fewer individuals who received the anti-trade introduction (Group 2), and 19% fewer respondents who received both the anti-trade and pro-trade introductions together (Group 3), said they favored increasing trade. Thus, not only did the anti-trade arguments have a large impact on reported attitudes when applied in isolation, they also appear to have trumped the pro-trade arguments when both were read to respondents. In fact, respondents who were read only the pro-trade introduction (Group 1) were actually no more likely to express support for increasing trade than those who received no introduction – the effect was even slightly reversed (negative), although not statistically discernable from zero.²¹

[Table 2]

²⁰ Less than 2% of all respondents answered “Don’t know” to the trade question. These observations were excluded from all the analysis reported here.

²¹ Full estimations of preferences are presented below, with tests of the effects (with standard errors) of the experimental treatments and other variables, but using two-sample difference-of-means tests (with unequal variances) shows that the differences between average support for trade in Groups 2 and 3, compared with Group 4, are significant at the .99 level.

Table 3 reports the response frequencies in each experiment group categorized according to the intensity of stated support for, or opposition to, increasing trade. Across the board, those respondents who were read the pro-trade introduction (Group 1) did not differ significantly in their stated views, or the intensity of those views, from those who received no introduction (Group 4). Large differences appear, on the other hand, when we compare those groups with respondents who were read the anti-trade arguments alone (Group 2) or in combination with pro-trade arguments (Group 3). What is perhaps most interesting in this regard is that the differences are starkest at the extremes; that is, differences in the way the question was framed had the greatest impact on the frequency with which respondents stated they were either strongly in favor of, or strongly opposed to, increasing trade. Compared to those who were read no introduction, for instance, among those who heard the anti-trade arguments 13% fewer individuals said they strongly favored increasing trade and 12% more said they were strongly opposed to increasing trade.

[Table 3]

Overall, the results suggest that there is considerably more popular support for trade liberalization than we have been led to believe based upon past surveys. Across all experimental groups, some 61% of respondents stated that they favored increasing trade with other nations, and 24% said that they strongly favored increasing trade. Among those who were asked to state their views without hearing any kind of introduction to the trade question, 71% favored increasing trade (31% strongly). These results fit well with the findings from the recent Pew Global Attitudes Project, which reported majority support for “growing trade and business ties” in the United States. It seems very clear why some prominent alternative surveys – most notably, the NES and the ISSP surveys – have produced very different results suggesting majority opposition to trade. The questions posed in these surveys use wordings that have a powerful effect on responses. The results from the experiment indicate that when common anti-trade

arguments frame the trade issue for survey respondents, their stated views about trade are shifted radically in a protectionist direction.²²

This result will not come as a great surprise to those familiar with opinion surveys (and with surveys on foreign policy issues, in particular). What is perhaps more curious is the very clear finding that respondents who were read the pro-trade arguments before being asked to state their own opinion about the issue were not significantly more likely to express support for trade than those asked the question with no introduction at all (and that, among respondents given *both* pro-trade and anti-trade arguments, support for trade was essentially the same as it was among those given *only* the anti-trade introduction). In a nutshell, the most common forms of pro-trade rhetoric, focusing on the creation of jobs in exporting industries and the lowering of prices for consumers, appear to be completely ineffective in raising support for trade among survey respondents!

Why is the pro-trade frame so ineffective here compared with the anti-trade frame? One possible answer is that these specific arguments in favor of increasing trade are not actually the most persuasive ones (despite the findings from the Roper polls in the 1970s). Perhaps we would see bigger effects using alternative arguments, about trade providing competition for protected monopolies, for instance, and spurring development in poorer nations. An interesting related question is whether reactions to the different types of arguments employed in the experiment reflect some version of the famous “loss aversion” effect: when told to expect losses (the job losses in the anti-trade frame) people react more strongly than when they are told to expect gains (the job creation in the pro-trade frame). Unless pro-trade arguments can be stated in terms of meaningful losses (e.g., lost jobs in specific industries due to decreasing trade), they may not be able to compete with anti-trade frames when it comes to influencing

²² It should be noted here that even among those respondents given the anti-trade introduction in the experiment (Group 2), a majority (54%) still favored increasing trade. The difference between this result and the findings from the NES and ISSP surveys might be explained by the other critical differences in the question wordings (e.g., the invocation of “foreign” vs. “American” in the NES question). It is also possible that agreement or acquiescence bias might be a factor: both the NES and ISSP surveys ask respondents whether they agree with (favor) limits on imports, whereas here respondents are asked whether they favor increasing trade. To the extent that individuals are

the views of wavering individuals.²³ Separate experiments would be needed to test whether such alternative types of messages are more potent.

C. Individuals' Sensitivity to Framing and Education

It seems very clear that any general assessment of public attitudes toward trade must take into account the effects of issue framing in the survey questions. This brings us to the next issue: whether some groups of individuals are more sensitive to framing than others. In particular, given that education is typically treated as a core determinant of trade policy preferences, it is critical that we know whether sensitivity to framing is correlated with education at all. The evidence from the experiment is very revealing on this question. The magnitude of the observed framing effects is strongly related to the education levels of respondents. Table 4 provides a simple picture of this relationship. Looking first at highly educated respondents (i.e., those with at least some exposure to college-level education), comparing across experimental groups shows that the percentage favoring trade was only 6% lower among those receiving the anti-trade introduction than among those who heard the pro-trade introduction (17% lower than among those who received no introduction at all). For respondents with less education (i.e., no college-level education at all), the support for trade was 21% lower among those who heard the anti-trade introduction than among those who heard the pro-trade arguments (20% lower than among those who heard no introduction).²⁴ Less educated respondents were more sensitive (in the expected ways) to both types of question framing: the anti-trade frame increased their opposition to trade more dramatically than it did among highly educated individuals, and the pro-trade frame increased (though not significantly) their support for trade while having the opposite effect among more the highly educated.

biased toward simply agreeing with any proposition posed by an interviewer, this may have biased the results in opposite ways. On acquiescence bias in surveys see Schuman and Presser 1981.

²³ A related issue is the so-called “negativity bias” discussed in the psychological literature. Evidence suggests that people generally tend to expect good things to happen, and when they are confronted with evidence to the contrary, they attach more weight to such “negative” news when updating their prior beliefs than they do to good news: see Kanouse and Hanson 1972; Skowronski and Carlston 1989.

²⁴ The TESS survey asks respondents to report the highest level of education they have attained, coding these by type of institution. For the basic comparisons I have simply grouped those reporting “some college” or a bachelor’s

[Table 4]

Comparing the difference between the responses of the highly educated and less educated in each experimental group (reading horizontally in Table 4) highlights the potential danger here: the difference between the support for trade among highly and less educated individuals is only 8% for those receiving the pro-trade frame, but this difference is 23% among those who were read the anti-trade introduction, and 31% among those in the both-introduction group. If one only looked at the responses to the question prefaced with anti-trade arguments, or at the question incorporating both frames, one would have a much larger estimate of the impact of education on trade policy preferences than if examining responses in the other experimental groups.

To gauge the impact of framing in a more precise fashion, we can also estimate individual trade preferences using respondents' answers to the question about whether they favored or opposed increasing trade as the dependent variable (1=favor and 0=oppose). Table 5 reports the results from probit estimations that include a standard set of core explanatory variables (see appendix for descriptive statistics). It is a simple matter to estimate the general impact of each different introduction to the trade question, using the "no introduction" treatment as the excluded category here. As we can see in the simplest specification (model 1), and consistent with the findings reported above in Table 2, the estimated general effect of the anti-trade introduction is to reduce support for trade by 18% (s.e. 5%); the anti-trade and the pro-trade introductions applied together reduce support for trade by approximately 21% (s.e. 5%); while the pro-trade arguments by themselves have no significant impact on responses. While age appears to have no significant effect on attitudes toward trade, gender has a very strong effect, with women being approximately 11% (s.e. 3%) less likely to favor increasing trade than men. And as reported in previous studies, highly educated respondents (those with any college-level education) are, in general, 20% (s.e. 3%) more likely to support increasing trade than less-educated counterparts.

or higher degree as "highly educated," in contrast to all other respondents. Finer distinctions are made in the estimations below.

[Table 5]

Model 1 imposes the constraint that all individuals are equally sensitive to framing effects – an assumption we now suspect might be too restrictive. Model 2 incorporates separate interaction effects between each of the experimental treatments and each of the explanatory variables in model 1. The findings confirm the results from the analysis of response frequencies above. Most importantly, the estimated effects of education can vary substantially depending upon the way the question is framed. Specifically, education accounts for 4 to 5 times as much of the variation in responses among those who heard the anti-trade arguments, than it does among those who received just the pro-trade frame – the effect of exposure to college education in the former group is to raise the probability of support for trade by roughly 25%, all else equal, while in the latter group the corresponding effect is only a 5% increase.²⁵

Models 3 and 4 repeat the analysis using more detailed measures of educational attainment. Model 3 just re-estimates the restricted form of the specification, replacing the binary variable for “highly educated” with an array of dummy variables indicating whether the highest level of education attained was a degree from a community college, some college education (but no college degree), a bachelor’s degree from a college or university, or an advanced degree from a college or university. The excluded category here includes those respondents who finished their formal education at the high school level.²⁶ Exposure to higher education (of any type) does have a significant, positive impact on the probability of favoring trade. The estimated effects of different educational qualifications can vary substantially in magnitude, however, depending upon how the trade issue has been framed, as is clear when we allow for the interaction effects in model 4 – three of these interaction effects are sizeable and statistically

²⁵ Note that interaction effects between age and gender and the experimental treatments are included in models 2-4, but are not reported in Table 5 to economize on space. Men appear no more or less sensitive than women to any of the issue frames (none of the interactions between gender and the experimental treatments was statistically significant). There is some evidence that younger respondents are more susceptible to pro-trade framing than older individuals – the interaction between age and the pro-trade experimental treatment was negative and significant. Full results are available upon request and can be downloaded at [http:// << author >>](http://<< author >>).

²⁶ The TESS data does distinguish those who received their high school diploma from those who did not, but the latter group is so small (6% of the sample), that it is incorporated here in a larger excluded category that includes those who finished high school but gained no further formal educational qualifications (24% of the sample).

significant at conventional levels (and others come very close). Interestingly, community college students actually appear to be significantly more sensitive to anti-trade framing than less educated counterparts (so much so that, for individuals who hear those arguments, there is no significant difference at all in support for trade between those who attended community college and those who did not). Again, it is clear that individuals who were exposed to colleges education (even if they did not receive their BA degree), were less sensitive to issue framing than those only educated at the high school level – this is especially clear when it comes to sensitivity to pro-trade arguments for some reason, which made much more of an impact among the less educated. Just looking at those individuals who received the pro-trade experimental treatment, there is actually no significant difference in expressed support for trade between those who attended college (or indeed, received their BA) and those with no formal education beyond the high-school level.

Overall, these results raise significant doubts about the assumption that we can make robust inferences about particular determinants of attitudes toward trade using the available survey data, taking for granted that such variables are unrelated to sensitivity to issue framing. The relationship between individual sensitivity to framing and education, in particular, suggests that the magnitude of the estimated effects of education on trade preferences will vary markedly with changes in question wording, and thus perhaps provides less robust support for the Stolper-Samuelson theorem than has been suggested in previous studies.

D. The Endorsement Experiment

Given that issue framing can have such large effects on survey responses, this raises a variety of questions about whether and how these effects carry over into real world politics. The traditional view is that voters are very susceptible to manipulation by politicians and by the media, who have more information about key issues and can shape the language and concepts employed in public debates (see Lippman 1922; Almond 1950), and recent work on political communication and public opinion has highlighted this possibility (e.g., Riker 1986; Zaller 1992, 95; Bartels 1998; Manheim 1991, 4-5). Thus

trade politics, like other areas of politics, may best be viewed as a competition in framing – a competition that is revealed in the intimate relationships that have developed between news organizations and the media experts (or “spin doctors”) employed by governments, political parties, and special interests to frame issues in ways that benefit them most (see Nelson, Oxley, and Clawson 1997, 224). The intense politicking in the media during the debate over NAFTA in 1993 may provide the best example of this type of competitive framing in trade politics (see Holsti 1996, 52). That contest arguably reached its climax when Al Gore presented Ross Perot with a framed picture of Senator Reed Smoot and Representative Willis Hawley during their televised debate on CNN, driving home the message that opposition to NAFTA was akin to endorsing the famously protectionist Smoot-Hawley Tariff of 1930 and the Great Depression which followed it. (Perot countered with his own photographs of people erecting cardboard houses in slums beside American-owned factories in northern Mexico.)

Although the NAFTA legislation did ultimately make it through Congress, this media-driven scenario is not a happy one for supporters of greater trade openness. While there is an almost unshakeable consensus among economists on the benefits of trade openness, the counterintuitive loveliness of the law of comparative advantage ironically makes it much more difficult to convey the principal case for trade to the general public. There has long been a concern among economists that the case for trade openness, while stronger theoretically and empirically than arguments in favor of trade barriers, is actually much harder to make rhetorically (Krugman 1993) – and indeed, in the core survey experiment described above, the common arguments in favor of trade openness, that focus on job creation in export industries and lower prices for consumers, had no positive effect on overall levels of support for trade.

However, new research on political communication has suggested that issue framing, while having large effects on responses to surveys and questions asked in laboratory experiments, has a more limited impact in real political contexts (see Druckman 2001a). In particular, studies have shown that framing effects are mitigated when individuals have access to cheap information that can help them decide how they should make their political choices (see Sniderman 2000; Druckman 2001b). Most

importantly, voters can take cues from experts, political parties, and other organizations that they perceive to be knowledgeable and trustworthy sources of advice on policy issues (see Popkin 1994; Lupia and McCubbins 1998; Sniderman 2000; Druckman 2001b, 2001c). Similar results seem likely for framing effects and attitudes toward trade and globalization.

As a preliminary test, I designed a second experiment to gauge whether knowledge of the endorsement of trade openness by economic experts mitigated framing effects among respondents to the TESS survey. Another 4 experimental groups were created for this experiment (each comprising 10% of the total TESS sample) and, as before, these were read pro-trade, anti-trade, or both types of introductions, or no introduction at all; but now, before being read the assigned introduction, all respondents in these 4 groups were also read the following statement:

According to the New York Times, almost 100 percent of American economists support increasing trade with other nations. In 1993 over a thousand economists, including all living winners of the Nobel Prize in economics, signed an open letter to the New York Times urging people to support efforts to increase trade between the United States and neighboring countries.

The baseline assumption is that economists, especially Nobel Prize-winning ones, are generally regarded as credible and trustworthy sources of information about the effects of economic policies. The experiment is modeled on those conducted by Druckman (2001b), who has demonstrated that framing effects are reduced when subjects in experiments observe an endorsement of one choice option or another by some set of credible experts – the specific case he examined involved a choice between types of medical treatments for cancer (surgery versus radiation), with one option being endorsed by “a group of lung cancer specialists” from a well-known medical research institution. Table 6 reports the results.

[Table 6]

The most obvious effect of the economists’ endorsement was to raise support for trade across the board. Overall, those stating that they favored increasing trade rose from 61%, in the main experiment, to 72% among those who received the extra information about economists. The endorsement had the largest impact on those who were also given the anti-trade introduction, either alone (the endorsement pushed

support for trade up by 19% among those respondents) or in combination with the pro-trade introduction (11%). The endorsement had the smallest effect on those who received only the pro-trade introduction (6%), presumably because the new information was less divergent from the information already available to those respondents. Most importantly, the endorsement does seem to mitigate the impact of other types of issue framing. Among those who received the anti-trade introduction, for instance, 17% fewer favored increasing trade compared with those who heard no introduction at all in the main experiment; once the expert endorsement was introduced, that difference fell to just 7%. Support for trade was 12% lower among those who heard the anti-trade introduction compared with those who heard the pro-trade introduction in the absence of the endorsement; with the endorsement, the differences was only 8%.

These findings suggest that the types of issue framing effects observed in the core experiment, while a critical problem for interpreting the results from opinion surveys, which require that respondents render their views with no time for reflection and no access to advice or information from third-party sources, may be less critical for predicting choices by voters in the real world of politics, where citizens have time to obtain cheap information from numerous sources about which choices are best for them. This does leave open the question, of course, of which types of sources individuals regard as trustworthy or credible on the trade issue – that is, just where will voters look for their cues about how to react (in the political realm) to globalization? It also shifts the focus of research in an important way, suggesting that the popular politics of trade may be less of a competition in framing than a competition for endorsements.²⁷

²⁷ Recent research suggests that, in general, voters rely heavily upon informational cues from political parties and special interest groups (Popkin 1994; Lupia and McCubbins 1998). Organized lobby groups have always played a critical role in American trade politics, but much of the scholarly debate has focused on behind-the-scenes lobbying by groups aimed at winning special favors from policymakers, typically in the form of trade barriers (for the classic treatment, see Schattschneider 1935; more recently, see Grossman and Helpman 1994). There has been much less work on the role of groups as “endorsers” of trade policy positions (Milner 1997, pp.83-95). The experimental results above, along with evidence from recent trade debates, suggest that more research along these lines would be very illuminating. It seems clear, for instance, that in order to increase support for NAFTA during the height of the debates in Congress, the Clinton administration focused much of its efforts on winning endorsements from key groups. For instance, one important turning point came when, in response to the announced environmental side

IV. Conclusions and Implications

Just how strong is the opposition to trade liberalization among voters? And how deep are the divisions over trade between particular groups in society? These are important political questions at a time when multilateral trade negotiations have stalled and controversy about the “outsourcing” of jobs to foreign countries has come to dominate media coverage of the trade issue and policy debates in the United States. The rhetorical attack on trade liberalization seems only to have been stepped up in recent years, with self-styled populists like Ralph Nader and Patrick Buchanan attacking globalization by invoking voter antipathy towards large corporations and foreigners, in roughly equal measure (Irwin 2002, 1-2). During last US election campaign, the public debate about trade was been cast almost exclusively in terms of the “outsourcing” of American jobs to foreign nations, with heads of companies engaging in the practice labeled “Benedict Arnold CEOs” by one presidential candidate.²⁸

The findings from the experiments reported above suggest that opinion surveys can be very imperfect guides to gauging the extent of opposition to international trade among voters, due to the powerful effects of issue framing. These effects may also make it difficult to make robust estimates of the effects that some key individual-level characteristics (like education) have on opinions about trade. In the main survey experiment, respondents hearing anti-trade arguments were far less likely to favor increasing trade with other countries than those asked the same question without introduction; on the flip side, however, respondents who were read pro-trade arguments were actually no more likely to express support for increasing trade than those who heard no introduction to the trade question. In addition, the responses of less educated individuals were more sensitive to framing effects than those of highly (i.e. college) educated individuals. The results from the second experiment indicate that the (anti-trade) framing effects

agreement to NAFTA, some prominent environmental groups (including the World Wildlife Fund and the Environmental Defense Fund, but no the Sierra Club) gave their support for NAFTA.

²⁸ The statement about CEOs was made by Senator John Kerry, on February 4, 2003. In the same month, Gregory Mankiw, Chairman of the President’s Council of Economic Advisers, was forced to retract (and apologize for) comments he made describing outsourcing as just another aspect of international trade that benefits the American economy. See *The Economist*, “The Great Hollowing-Out Myth,” February 19th, 2004.

observed in the main experiment are dramatically reduced when subjects are informed that most leading economists endorse trade openness. Access to this advice from economists raises support for trade substantially and across-the-board. Combined these results suggest that competition for endorsements may play a larger role in actual trade politics than competition in framing. Framing effects, though, remain a critical problem for research that uses survey data to measure and explain attitudes toward trade and, by presumptive extension, other aspects of globalization.

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TABLE 1: Opposition to Trade Openness – Countries in ISSP and Pew Surveys

Average expressed opposition to trade openness in each country in percent:

Country	ISSP 1995 National Module ^a	Pew 2003 Global Attitudes Project ^b	Difference
Bulgaria	77.38	7.17	70.21
Canada	45.82	10.91	34.91
Czech Republic	52.12	14.14	37.98
Germany	38.85	6.61	32.24
Great Britain	63.33	8.87	54.46
Italy	60.51	13.03	47.48
Japan	66.50	23.93	42.57
Philippines	66.50	12.46	54.04
Poland	64.89	16.20	48.69
Russia	60.06	7.05	53.01
Slovak Republic	55.40	12.17	43.23
United States	64.37	18.18	46.19
Mean	59.64	12.56	47.08
Standard deviation	10.32	5.12	

a. Percentage of respondents in each country who said they agree with the statement: “[Respondent’s country] should limit the import of foreign products in order to protect its national economy.”

b. Percentage of respondents in each country who answered “somewhat bad” or “very bad” to the following questions: “What do you think about the growing trade and business ties between [respondent’s country] and other countries – do you think it is a very good thing, somewhat good, somewhat bad, or a very bad thing for out country.”

TABLE 2: Percentages of Respondents Who Favor Increasing Trade**Question: *Do you favor or oppose increasing trade with other nations?***

All Respondents (N=950)	61%
Pro-trade Introduction (Group 1: N=259)	66%
Anti-Trade Introduction (Group 2: N=227)	54%
Both Introductions (Group 3: N=228)	52%
No Introduction (Group 4: N=236)	71%

TABLE 3: Intensity of Respondents' Attitudes Toward Increasing Trade**Question: *Is that strongly favor (oppose) or somewhat favor (oppose)?***

	<u>Opposed to Increasing Trade:</u>		<u>Favor Increasing Trade:</u>	
	Strongly Oppose	Somewhat Oppose	Somewhat Favor	Strongly Favor
All Respondents (N=950)	16%	23%	37%	24%
Pro-Trade Introduction* (Group 1: N=259)	14%	19%	39%	27%
Anti-Trade Introduction (Group 2: N=227)	23%	23%	36%	18%
Both Introductions (Group 3: N=228)	17%	31%	33%	19%
No Introduction* (Group 4: N=236)	11%	18%	41%	31%

* Percentages do not sum to one hundred due to rounding.

TABLE 4: Education and Sensitivity to Framing of the Trade Issue

Question: *Do you favor or oppose increasing trade with other nations?*

	<u>Percentages Who Favor Increasing Trade:</u>		
	Highly Educated (≥Some college)	Less Educated (No college)	Difference
Pro-Trade Introduction (Group 1)	70% N=137	62% N=122	8%
Anti-Trade Introduction (Group 2)	64% N=123	41% N=104	23%
Both Introductions (Group 3)	65% N=134	34% N=94	31%
No Introduction (Group 4)	81% N=122	61% N=114	20%

TABLE 5: Individual Support for Increasing Trade – Framing Effects and EducationDependent variable =1 if respondent favors increasing trade with other nations (=0 if opposes).^a

	1	2	3	4
Pro-trade intro.	-0.047 [0.047]	0.316*** [0.121]	-0.054 [0.047]	0.298** [0.128]
Anti-trade intro.	-0.176*** [0.048]	-0.036 [0.163]	-0.182*** [0.049]	-0.061 [0.171]
Both intros.	-0.208*** [0.048]	-0.289* [0.169]	-0.211*** [0.048]	-0.303* [0.175]
Age	-0.002 [0.001]	0.001 [0.002]	-0.001 [0.001]	0.001 [0.002]
Female	-0.111*** [0.032]	-0.148** [0.066]	-0.111*** [0.033]	-0.166** [0.068]
Highly Educated	0.197*** [0.032]	0.247*** [0.066]		
Community College			0.204*** [0.046]	0.348*** [0.066]
Some College (no degree)			0.147*** [0.040]	0.225*** [0.076]
College Degree (BA)			0.227*** [0.037]	0.257*** [0.072]
Advanced Degree (MA/PhD)			0.308*** [0.034]	0.363*** [0.060]
Highly Educated x Pro-trade intro.		-0.192** [0.096]		
Anti-trade intro.		0.025 [0.096]		
Both intros.		0.05 [0.094]		
Community College x Pro-trade intro.				-0.257 [0.195]
Anti-trade intro.				-0.357** [0.180]
Both intros.				-0.357** [0.176]
Some College (no degree) x Pro-trade intro.				-0.231* [0.131]
Anti-trade intro.				-0.179 [0.139]
Both intros.				0.054 [0.124]
College Degree (BA) x Pro-trade intro.				-0.218 [0.133]
Anti-trade intro.				0.036 [0.127]
Both intros.				0.041 [0.129]
Advanced Degree (MA/PhD) x Pro-trade intro.				-0.177 [0.180]
Anti-trade intro.				0.133 [0.174]
Both intros.				0.064 [0.176]
Observations	942	942	942	942
Pseudo R-squared	0.06	0.08	0.09	0.11

a. Probit estimations: marginal effects ($\partial F/\partial x$) are shown with standard errors in parentheses. * $p < 0.10$ ** $p < 0.05$ *** $p < 0.01$. Models (2), (3), and (4) also include interactions between age and gender and pro-trade, anti-trade, and both introductions (effects not shown).

TABLE 6: Percentages of Respondents Who Favor Increasing Trade – Endorsement Experiment**Question: *Do you favor or oppose increasing trade with other nations?***

	Main Experiment (No endorsement)	With Pro-Trade Expert Endorsement *	Difference
All Respondents	61% N=950	72% N=628	+11%
Pro-Trade Introduction (Group 1)	66% N=259	72% N=161	+6%
Anti-Trade Introduction (Group 2)	54% N=227	73% N=154	+19%
Both Introductions (Group 3)	52% N=228	63% N=160	+11%
No Introduction (Group 4)	71% N=236	80% N=153	+9%

* Before being read an introduction and asked to answer the question, each respondent was read the following: “According to the New York Times, almost 100 percent of American economists support increasing trade with other nations. In 1993 over a thousand economists, including all living winners of the Nobel Prize in economics, signed an open letter to the New York Times urging people to support efforts to increase trade between the United States and neighboring countries.”

Appendix: Descriptive Statistics

	Obs.	Mean	Std. Dev.	Min.	Max.
Favor Increasing Trade	950	0.6116	0.4876	0	1
Pro-Trade Introduction	970	0.2721	0.4453	0	1
Anti-Trade Introduction	970	0.2423	0.4287	0	1
Both Introductions	970	0.2402	0.4274	0	1
No Introduction	970	0.2454	0.4305	0	1
Age	962	48.1715	16.7532	18	93
Female	970	0.5773	0.4942	0	1
Highly Educated	970	0.5454	0.4982	0	1
Some College (No degree)	970	0.1970	0.3979	0	1
Community College	970	0.0897	0.2859	0	1
College Degree (BA)	970	0.2072	0.4055	0	1
Advanced Degree (MA or PhD)	970	0.1371	0.3441	0	1
